



India Meteorological Department
FDP STORM Bulletin No.56(30-04-2017)

1. CURRENT SYNOPTIC SITUATION at 0300UTC of the Day:

SYNOPTIC FEATURES:

The Western Disturbance as an upper air cyclonic circulation over north Pakistan and adjoining Jammu & Kashmir now lies over Jammu & Kashmir and neighbourhood and extends upto 3.6 Km above mean sea level with a trough aloft at 5.8 km above mean sea level roughly along Long. 72.0°E and north of Lat. 30.0°N.

The upper air cyclonic circulation over central Pakistan & neighbourhood now lies over Haryana and neighbourhood and extends upto 3.1 Km above mean sea level.

The trough from east Bihar to south Chhattisgarh now runs from east Bihar to Telangana across Jharkhand and Chhattisgarh and extends upto 1.5 km above mean sea level with two embedded upper air cyclonic circulations one over Jharkhand and another over Coastal Andhra Pradesh both extending upto 0.9 km above mean sea level.

A trough at mean level runs from West Rajasthan to southern parts of Gangetic West Bengal across West Uttar Pradesh, Madhya Pradesh and Jharkhand. A trough in low level easterlies runs from Maldiva area to Coastal Karnataka at 1.5 km above mean sea level. The upper air cyclonic circulation over east Assam & neighbourhood extending upto 0.9 km above mean sea level has become less marked. The trough from south Konkan to Comorin area across Interior Karnataka & interior Tamilnadu extending upto 1.5 km above mean sea level has become less marked.

A fresh feeble Western Disturbance likely to affect Western Himalayan region from 02nd May onwards.

SATELLITE OBSERVATIONS during past 24hrs and current observation:

Current Observation (based on 0300UTC imagery of INSAT 3D):

Convective Activity and cloud description:

Cell No	Date/Time (UTC)	Area/Location	CTBT (-°C)	Movement	Remarks If any
8	29/2130	E PJB HP Haryana adjoining NE Rajasthan	49	E-WARDS	Developing
	2200	-DO-	49		
	2300	S Haryana adjoining NE Rajasthan Delhi	50		
	30/0000	E Haryana adjoining NE Rajasthan Delhi	50		
	0100	E Haryana adjoining NW Uttar Pradesh Delhi	52		
	0200	NW Uttar Pradesh	43		
	0300	-DO-	--		
					Dissipating DISSIPATED

Scattered low/medium clouds seen over Delhi, rest Uttarakhand, rest Madhya Pradesh, rest Maharashtra, Rayalaseema and Bay islands.

Scattered low/medium clouds with embedded isolate weak to moderate convection seen over Uttar Pradesh, exterior Arunachal Pradesh, Northeast Madhya Pradesh, Vidarbha, Telangana, Coastal Andhra Pradesh,

Arabian Sea:

No Significant clouds over the region.

Bay of Bengal & Andaman Sea:

Scattered low/medium clouds with embedded moderate to intense convection seen over Andaman Sea adjoining Southeast Bay.

Past Weather:

Convection: Moderate to Intense convection was observed over Rajasthan adjoining Haryana, Himachal Pradesh North West Uttar Pradesh Marathwada Karnataka Telangana, Andhra Pradesh Tamilnadu Kerala Coastal Odisha West Bengal and North East states..

OLR: - Upto 200 wm^{-2} was observed over J&K and East Himachal Pradesh, Upto 230 wm^{-2} was observed over rest Himachal Pradesh, Uttarakhand, South East Rajasthan Sikkim, Arunachal Pradesh North Coastal Andhra Pradesh, Sikkim, Arunachal Pradesh, Upto 250 wm^{-2} was observed over Kerala.

Westerly Trough & Jet-Stream: No Trough & Jet stream observed over India.

Dynamic Features: Positive shear tendency observed over India.

Low Wind Shear is observed over south & neighborhood and Medium to high wind shear over rest parts of India.

A positive Vorticity field is observed over East Rajasthan, Saurashtra, North Madhya Pradesh, Bihar, West Bengal and North Odisha.

Positive Low Level Convergence observed over Rajasthan, Coastal Odisha and Negative low level convergence is observed over rest parts of India.

Precipitation:

IMR: Rainfall upto 30 mm was observed over J&K, Rainfall upto 20 mm was observed over South East Uttar Pradesh and North West Uttarakhand. Rainfall upto 10 mm was observed over Rest Himachal Pradesh, Rest Uttarakhand, Haryana, Delhi, North-West Uttar Pradesh, East Rajasthan, East Punjab, Marathwada, Assam, West Bengal, South West Odisha, North Coastal Andhra Pradesh, Karnataka Kerala, West Tamilnadu.

HEM: Rainfall upto 70 mm was observed over South-West J&K, South Himachal Pradesh and Uttarakhand . Rainfall upto 07 mm was observed over East Punjab, Haryana, Delhi, Uttar Pradesh, East Rajasthan, North West Bengal, Assam, Coastal Odisha Andhra Pradesh, Telangana, Karnataka, Kerala and West Tamilnadu

RADAR and RAPID observation:

No significant convection was observed in Radar Composite of 1320UTC and significant convection seen over Himachal Pradesh, Uttarakhand, Vidarbha and Telangana RAPID RGB Satellite imagery of 1230hrs IST.

Environmental condition (dust etc) and its forecast based on 00UTC of date:

Dust concentration was observed over northern Africa and some parts of eastern Asia. Dust concentration is expected to increase over western and northern India for next five days.

High PM10 concentration was observed over north-western and northern India. PM10 concentration is expected decrease over northern India for next five days.

2. NWP MODEL GUIDANCE:

NCMRWF (NCUM Forecasts based on 00UTC of the day):

1. Weather Systems: 12UTC Charts of Day-0 to Day-3 show feeble trough in MSLP over J & K.

12UTC charts on all days from Day0-4 show two zones of wind discontinuity at 925 hPa due to persistent anticyclonic flow over Arabian Sea and Bay of Bengal :(i) SW-NE extending from northern Karnataka-Telangana region to Odisha region. (ii) S-N extending from southern parts of TN to northern parts of Telangana-AP region.

Trough at 850 hPa over GWB and SHWB in Day0-4. A CYCIR over Punjab and adjoining Pakistan in Day-1-3 at 850 hPa At 500 hPa trough over NW India in Day-0.

Two prominent anti-cyclonic circulations at 850 hPa over Arabian Sea and Bay of Bengal from day-0 to Day-4.

2. Location of jet and jet core at 500hPa:-500hPa Jet core (>60kt): Weaker core winds at 12 UTC on all days over India.

3. Convergence at 850 hPa: At 12UTC Day-0: At some isolated locations over Odisha, Jharkhand, Chattisgarh. Additionally over one or two locations in MP and Maharashtra along the western Ghats.

At 12UTC Day-1: Prominent high values over Odisha, Chhattisgarh and Bihar.

At 12UTC on Day-2&3: All along the western ghats over Karnataka and Maharashtra. Over central India at several places over MP& Chhattisgarh with adjoining Rajasthan, UP and Jharkhand. Lower magnitude in Day-4

4. Low level Vorticity:-Positive Vorticity (>15 x 10⁻⁵/s): At 12UTC on on all Days 1-4 : over Assam-Arunachal region.

At 12UTC day1-2 : over isolated locations over Jharkhand-Chattisgarh-Bihar and WB region.

At 12UTC on Day-3: Over SHWB and GWB. Punjab-Adjoining Pakistan Himachal and west UP.

At 12UTC on Day-4: Over SHWB and GWB.

At 00UTC : very high values along the line of low level confluence and strong convergence

5. Showalter Index: Day-wise Sub-divisions with Showalter index <-4:

Day0: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, Uttarakhand, Himachal Pradesh, Jammu Kashmir, Odisha, Madhya Maharashtra, Coastal AP, Rayalseema, TN Puducherry, Coastal Karnataka, NI Karnataka, SI Karnataka, Kerala,

Day1: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, Odisha, Chhattisgarh, Coastal AP, Telangana, Rayalseema, TN Puducherry, SI Karnataka, Kerala,

Day2: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Bihar, Uttarakhand, Odisha, Konkan Goa, Vidarbha, Chhattisgarh, Coastal AP, Telangana, TN Puducherry, Coastal Karnataka, NI Karnataka, SI Karnataka, Kerala,

Day3: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Uttarakhand, Himachal Pradesh, Jammu Kashmir, Konkan Goa, Madhya Maharashtra, TN Puducherry, Coastal Karnataka, SI Karnataka, Kerala,

Day4: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, Uttarakhand, Himachal Pradesh, Jammu Kashmir, Odisha, Konkan Goa, Madhya Maharashtra, TN Puducherry, Coastal Karnataka, NI Karnataka, SI Karnataka, Kerala

6. K-Index: Daywise Sub-divisions with K-index >40: Day0: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Hry Chd Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, West RJ, East RJ, Odisha, West MP, Guj Reg, Saurashtra Kutch, Konkan Goa, Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalseema, TN Puducherry, Coastal Karnataka, NI Karnataka, SI Karnataka, Kerala,

Day1: Arunachal Pradesh, Assam Meghalaya, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Hry Chd Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, Odisha, Konkan Goa, Madhya Maharashtra, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalseema, TN Puducherry, Coastal Karnataka, SI Karnataka, Kerala,

Day2: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, Uttarakhand, Himachal Pradesh, Jammu Kashmir, Odisha, Konkan Goa, Vidarbha, Chhattisgarh, Telangana, TN Puducherry, Coastal Karnataka, SI Karnataka,

Day3: Arunachal Pradesh, Sub Himalayan WB, West UP, Uttarakhand, Himachal Pradesh, Jammu Kashmir, West RJ, East RJ, West MP, East MP, Konkan Goa, Madhya Maharashtra,

Day4: Arunachal Pradesh, Assam Meghalaya, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Himachal Pradesh, Jammu Kashmir, Odisha, Konkan Goa, Madhya Maharashtra, Chhattisgarh, NI Karnataka

7. Spatial distribution of TTI: Daywise Sub-divisions with TTI >52: Day0: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, Uttarakhand, Odisha, Madhya Maharashtra, Chhattisgarh, Coastal AP, Telangana, Rayalseema, TN Puducherry, Coastal Karnataka, NI Karnataka, SI Karnataka, Kerala,

Day1: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Bihar, East UP, Odisha, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalseema, TN Puducherry, Coastal Karnataka, SI Karnataka, Kerala,

Day2: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Uttarakhand, Odisha, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalseema, TN Puducherry, Coastal Karnataka, NI Karnataka, SI Karnataka, Kerala,

Day3: Arunachal Pradesh, NE NMMT, Sub Himalayan WB, Uttarakhand, Himachal Pradesh, Jammu Kashmir, Konkan Goa, Madhya Maharashtra, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalseema, TN Puducherry, Coastal Karnataka, NI Karnataka, SI Karnataka, Kerala,

Day4: Arunachal Pradesh, NE NMMT, Sub Himalayan WB, Gangetic WB, Bihar, East UP, Uttarakhand, Jammu Kashmir, Odisha, Konkan Goa, Madhya Maharashtra, TN Puducherry, Coastal Karnataka, NI Karnataka, SI Karnataka, Kerala

8. Rainfall: Daywise Sub-divisions with Precipitation >2cm:

Day1: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Gangetic WB, Uttarakhand, Kerala,

Day2: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, Bihar, East UP, Odisha, Telangana,

Day3: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB, SI Karnataka,

Day4: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Himachal Pradesh, Jammu Kashmir,

Day5: Arunachal Pradesh, Assam Meghalaya, NE NMMT, Sub Himalayan WB

IMD GFS (T1534) based on 00UTC the day:-

1. Weather Systems: The CYCIR over Punjab and adjoining areas moves eastward and lies over west UP and adjoining areas on day1. Forecasts show a trough extending from east UP to south peninsula would persist during next 3 days. Forecasts also show the feeble CYCIR over extreme NE parts of India will persist for the next 5 days. Contour at 500 hPa shows a feeble WD would affect the northern parts of the India during next two days.

2. Location of jet and jet core at 500 hPa:-500 hPa Jet core (>60kt): No presence of jet core over the Indian region for the next 5 days.

3. Low level Vorticity:-Positive Vorticity 850hPa (>12 x 10⁻¹/s): Mostly along the foot hill of Himalaya, northwest India, eastern parts of India and along trough over south peninsula during next 5 days.

4. Spatial distribution of T-Storm Initiation Index, Lifted Index, Total Total Index, CAPE, CINE and Sweat Index (High potential for thunderstorm):

T-Storm Initiation Index (> 4): Less than threshold value all over the country. 3-3.5 mostly along east coast, eastern part of the country, along west coast and over Gujarat but less than threshold value all over the country during next 5 days.

Lifted Index (< -2): Less than threshold value mostly along east coast, south peninsula, west coast, Gujarat, over Gangetic West Bengal and over Bihar, Jharkhand, east UP and parts of north eastern states during next 5 days

Total Total Index (> 50): Above threshold value over the most parts of central, northwest and eastern parts of India at 06 UTC and 12 UTC during next 5 days.

Sweat Index (> 300): Mostly along east coast, along west coast, Gujarat and adjoining areas eastern part of India and north eastern states during next 5 days.

CAPE (> 1000): Mostly along east coast, west coast, Gujarat over eastern part of India and parts of north eastern states during next 5 days.

CINE (50-150): Mostly along east coast, west coast, Gujarat and adjoining areas, parts of north eastern states, over Gangetic plain and eastern part of India during next 5 days.

5. Rainfall and Rainfall activity:

10-40 mm rainfall over NE states during next five days.

10-40 mm rainfall over HP and Uttarakhand during next 24 hours.

10-40 mm rainfall over J&K, HP and Uttarakhand on day3 and day4.

10-40 mm rainfall over sub-Himalayan West Bengal during next 48 hours.

10-40 mm rainfall over south peninsula during next two days.

IMD WRF (based on 00UTC of the day):

Model Reflectivity: 15-35 dBZ Model reflectivity over some parts of J&K, HP, Delhi, Haryana and Uttarakhand during next 24 hours.

15-30 dBZ over parts of Andhra Pradesh, eastern parts of India and over parts of NE states during next 24 hours.

20-30 dBZ over parts of Andhra Pradesh and Odisha on Day2.

15-30 dBZ over northwest parts of India, J&K, Delhi and Haryana on day3.

Spatial distribution of Total Total Index, K-Index, CAPE and CINE:

Total Total Index (> 50): Above threshold value over most parts of the country except extreme south peninsula, J&K and parts of NE states during next 72 hour.

K-Index (> 35): Less than threshold value over the country during the next 72 hour.

CAPE (> 1000): Mostly along east coast of India, over eastern parts of India, parts of NE states, west coast and Gujarat during next 3 days.

CINE (50-150): Mostly less than threshold value over coastal regions, higher than over central parts of India and within threshold limit over parts of north eastern states and south peninsula at 12 UTC during next three days.

Rainfall Activity: 10-40 mm over south peninsula and NE states during next 3 days.

3. IOP ADVISORY FOR 24 and 48Hrs:

Summary and Conclusions:

Presently, due to upper air cyclonic circulation over east Assam & neighborhood, the Assam, Meghalaya will experience heavy rainfall along with thunderstorm with gusty winds on Day-1 and Day-2. However, Arunachal Pradesh will receive heavy rainfall on Day-2.

The trough from east Bihar to south Chhattisgarh now runs from east Bihar to Telangana across Jharkhand and Chhattisgarh and extends upto 1.5 km above mean sea level with two embedded upper air cyclonic circulations one over Jharkhand and another over Coastal Andhra Pradesh both extending upto 0.9 km above mean sea level. This system will give rise to Thunderstorm with squall/gusty winds over Kerala, Interior Karnataka, Telangana, Rayalaseema Coastal Andhra Pradesh, GWB, Orissa, Bihar, and Jharkhand on Day-1. However, Telangana, Coastal Andhra Pradesh and Orissa may experience Thunderstorm with hail on Day-1.

The Western Disturbance as an upper air cyclonic circulation over Jammu & Kashmir and neighbourhood and a trough will give rise to Thunderstorm with hail possibility over Himachal Pradesh and Uttrakhand on Day-1

24 hour Advisory for IOP:

Assam, Meghalaya, Nagaland, Manipur, Mizoram, Tripura and Arunachal Pradesh
Kerala, Interior Karnataka, Telangana, Rayalaseema Coastal Andhra Pradesh,
GWB, Orissa, Bihar, Jharkhand
Sub Himalayan West Bengal, Sikkim
Himachal Pradesh, Uttrakhand, Haryana, Punjab, Delhi, North Rajasthan, Uttar Pradesh
South Chhattisgarh, South Madhya Maharashtra and Vidarbha

48 hour Advisory for IOP:

Arunachal Pradesh Assam, Meghalaya, Nagaland, Manipur, Mizoram, Tripura
Kerala, Interior Karnataka, Telangana, Rayalaseema Coastal Andhra Pradesh
Orissa, Bihar, Jharkhand
Sub Himalayan West Bengal, Sikkim
Himachal Pradesh, Uttrakhand, Uttar Pradesh

For NCMRWF NWP products:(<http://www.ncmrwf.gov.in/HomePage/NEPS-prod-1.php>)

For IMD NWP products:(http://nwp.imd.gov.in/diagpro_new.php)

For Synoptic plotted data and charts

<http://amssdelhi.gov.in/>

<http://www.amsskolkata.gov.in/>

For RAPID tool:

<http://rapid.imd.gov.in/>

Low Level Winds

http://satellite.imd.gov.in/archive/INSAT-3D-IMAGER/3D-PRODUCTS/AMV/LLW/MAR_2017/?C=M;O=D

Upper level winds

http://satellite.imd.gov.in/archive/INSAT-3D-IMAGER/3D-PRODUCTS/AMV/HLW/MAR_2017/?C=M;O=D

Past24hourHEMandIMRrainfall(upto03UTCoftoday)

IMR: http://satellite.imd.gov.in/img/3Ddaily_imr.jpg

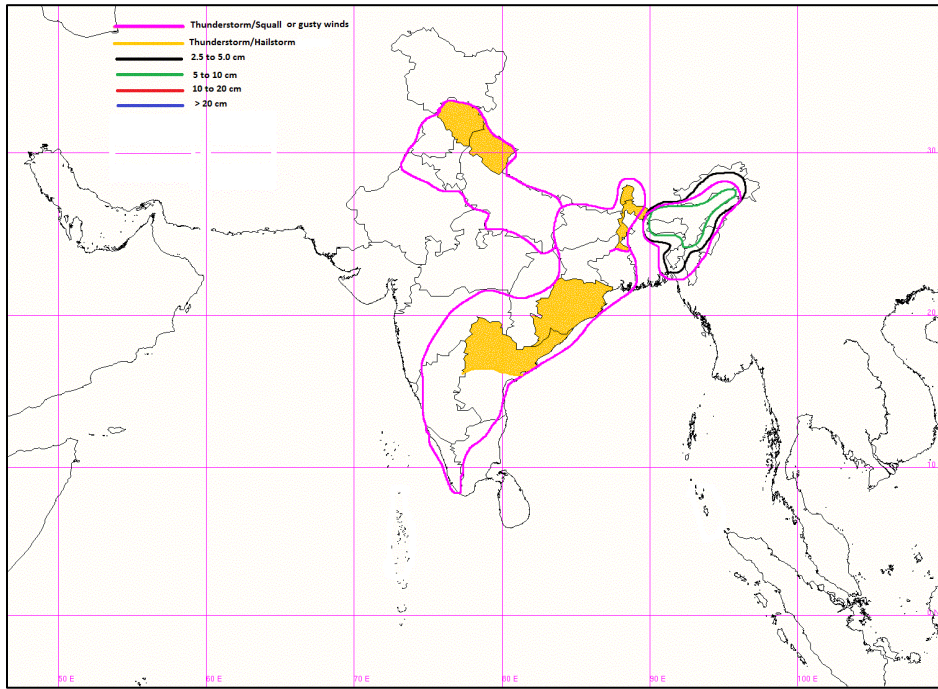
HEM: http://satellite.imd.gov.in/img/3Ddaily_he.jpg

ForRadarimagesofthepast24hoursincludingmosaicofimages:

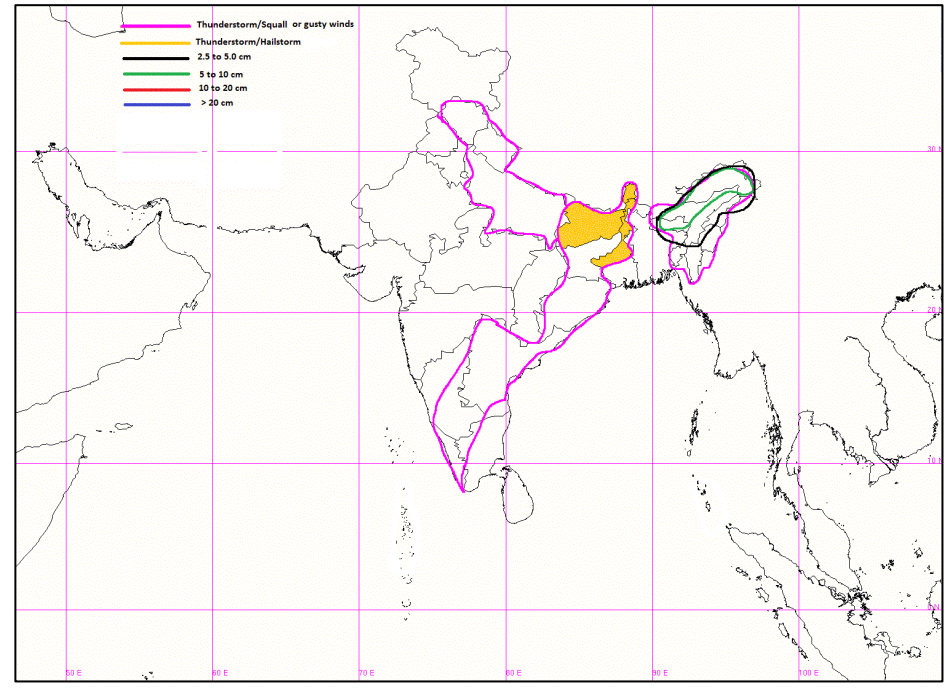
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Satellite sounder based T- Phigram

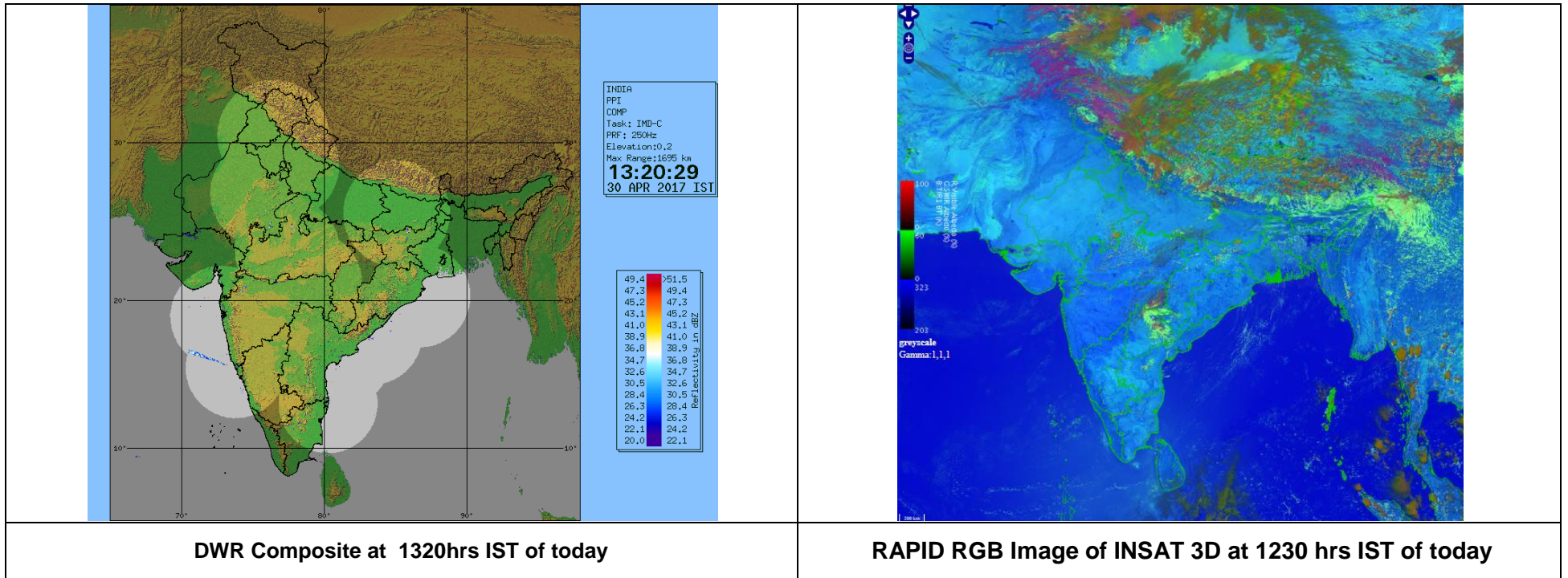
http://satellite.imd.gov.in/map_skm2.html



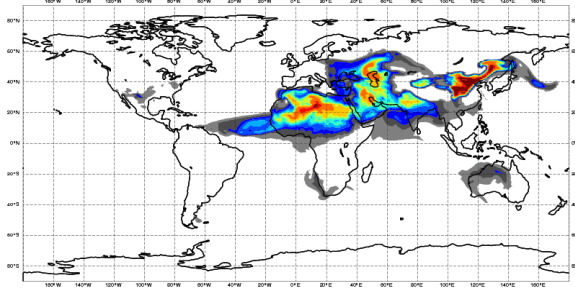
IOP Advisory for 24 hours



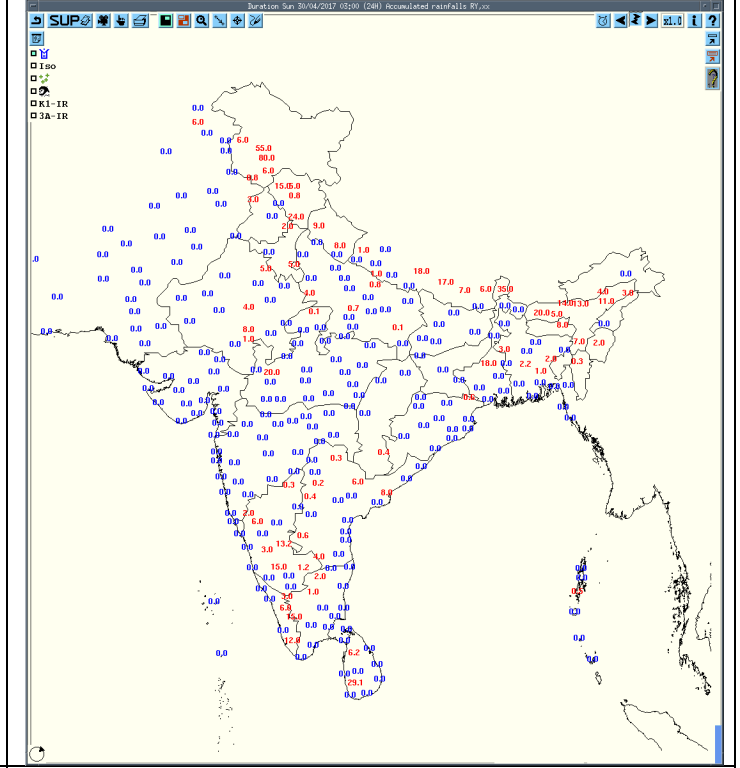
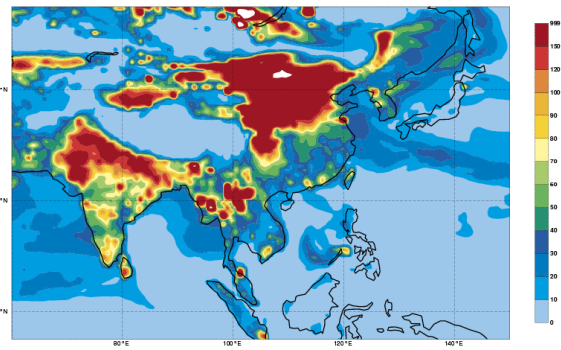
IOP Advisory for 48 hours



Saturday 29 April 2017 00UTC CAMS Forecast t+120 VT: Thursday 04 May 2017 00UTC
 Dust Aerosols Optical Depth at 550 nm



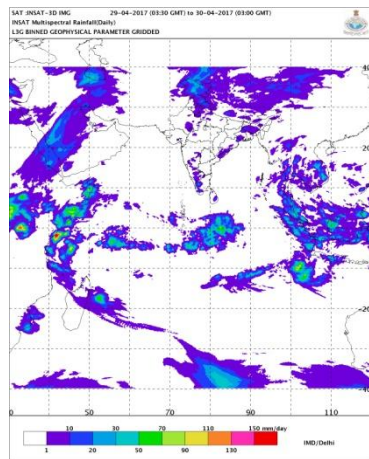
Saturday 29 April 2017 00UTC CAMS Forecast t+120 VT: Thursday 04 May 2017 00UTC
 Surface PM10 [$\mu\text{g}/\text{m}^3$]



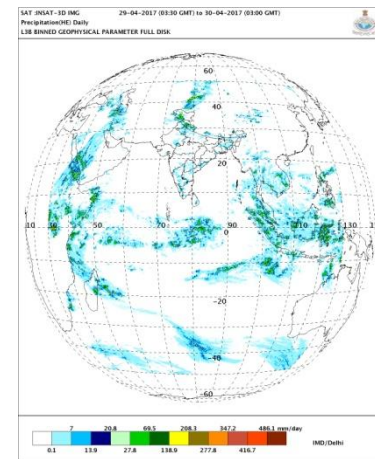
Forecast Dust Concentration for 00UTC of 4th May

PM10 Forecast for 00UTC of 4th May

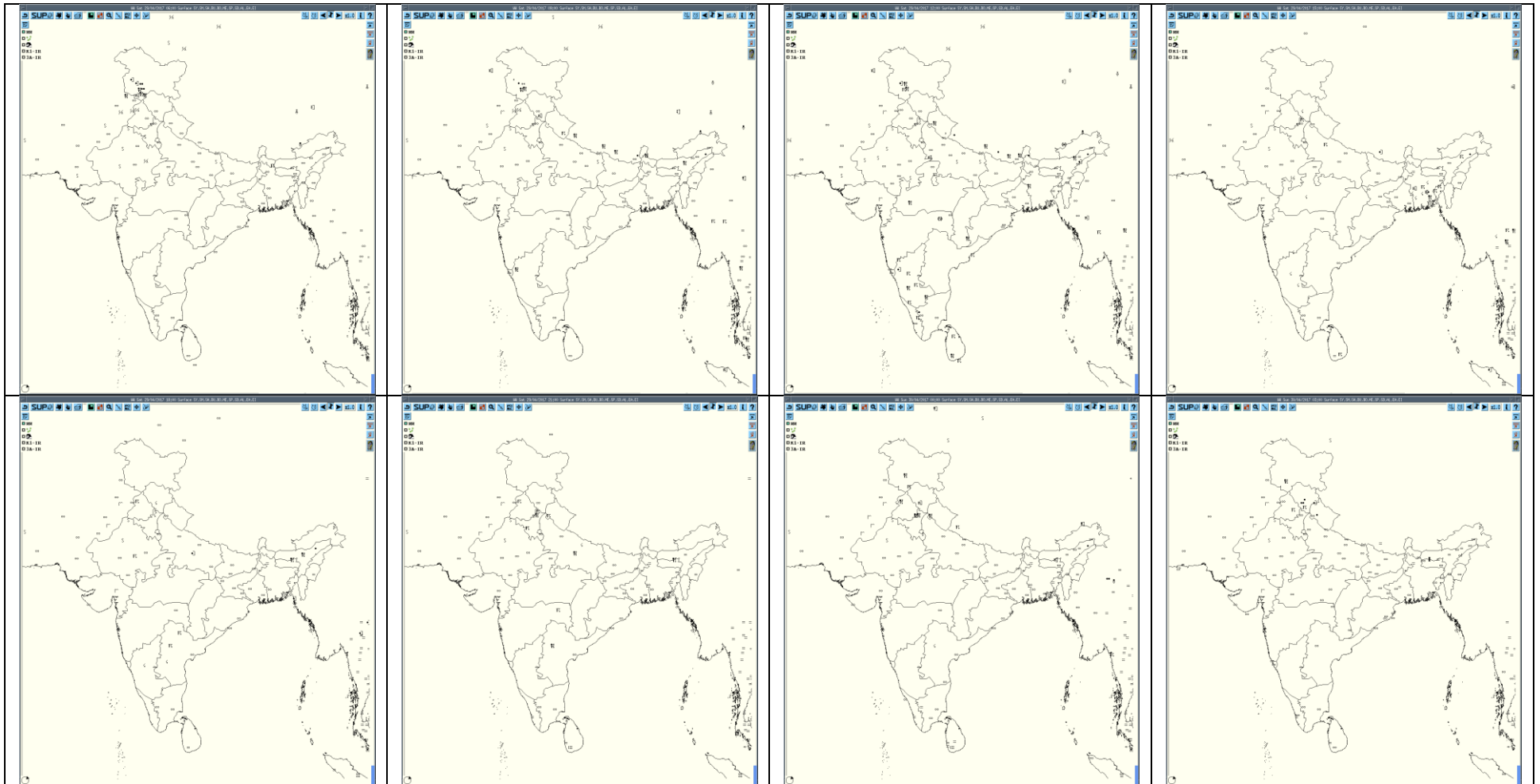
Accumulated 24 Hour rainfall (in red) recorded at 0300UTC of today



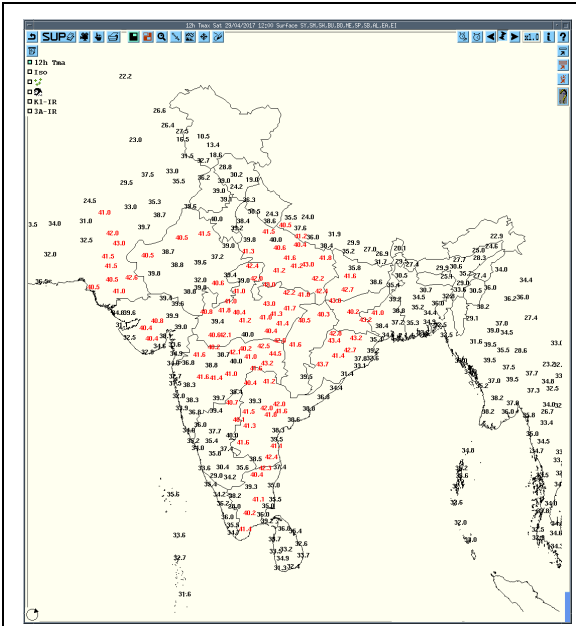
IMR Rainfall



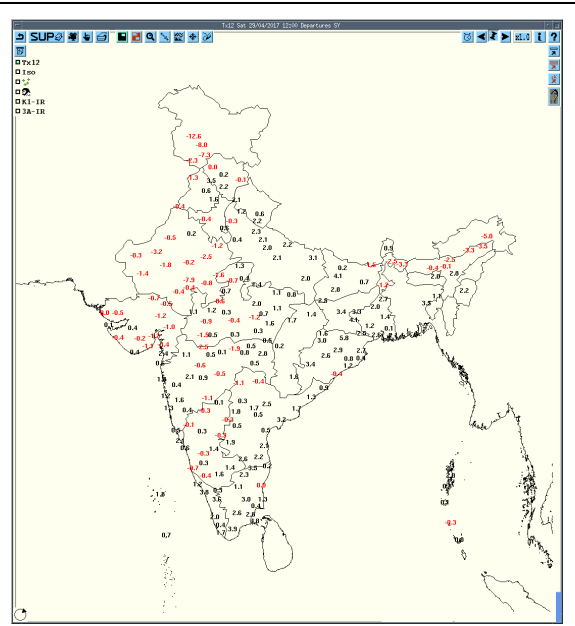
HEM Rainfall



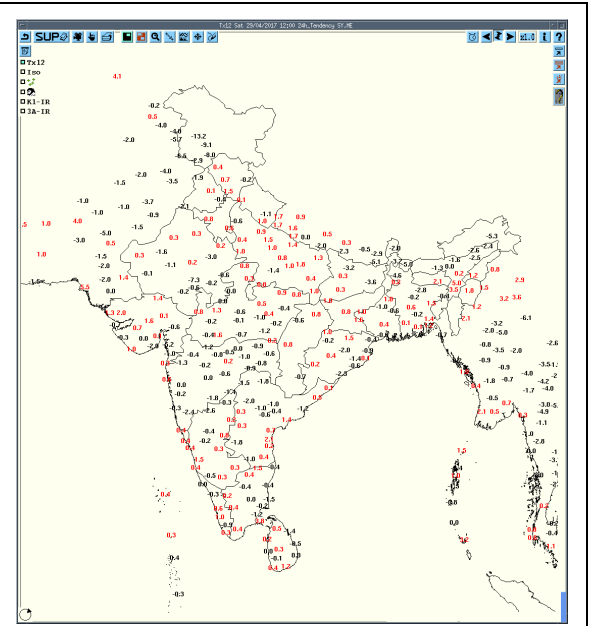
3hourly Past weather at 06, 09,12,15,18, 21UTC of yesterday and 00 & 03hrs UTC of today



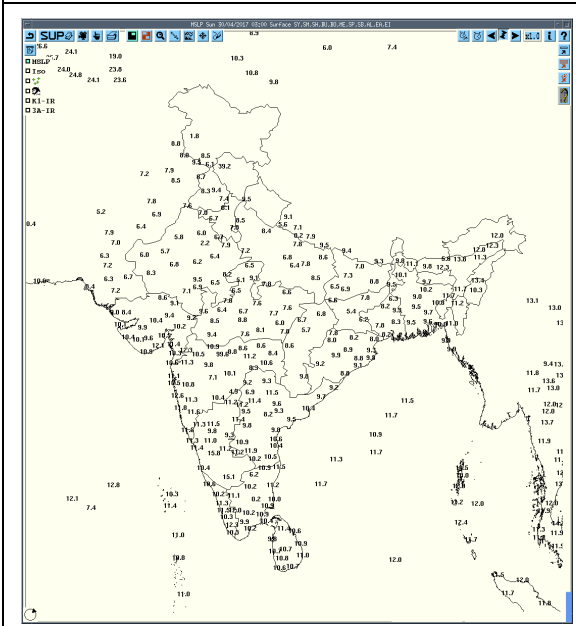
Tmax



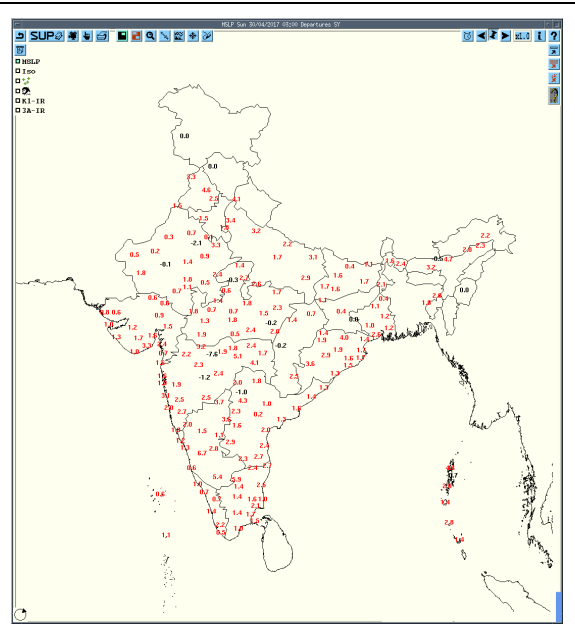
Departure Tmax



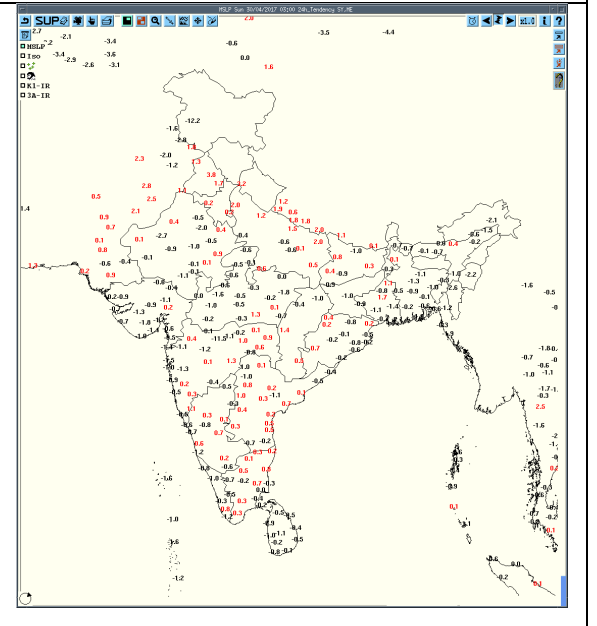
Tendency Tmax



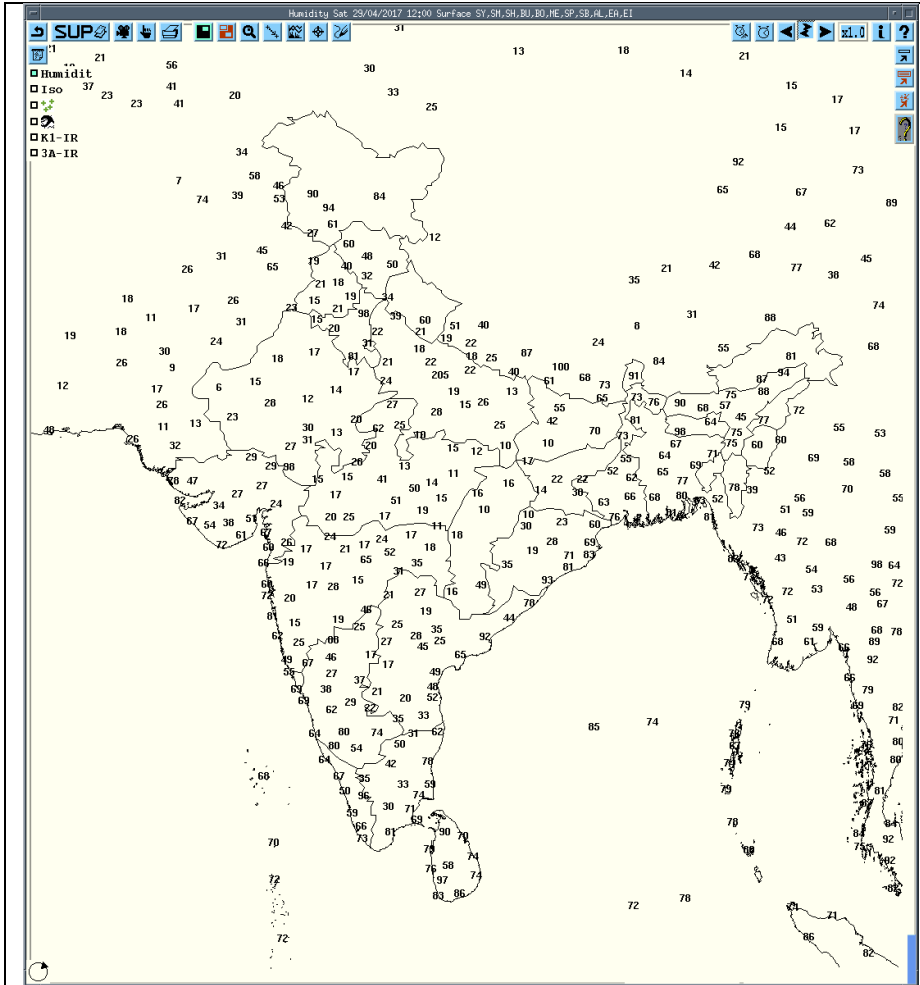
MSLP



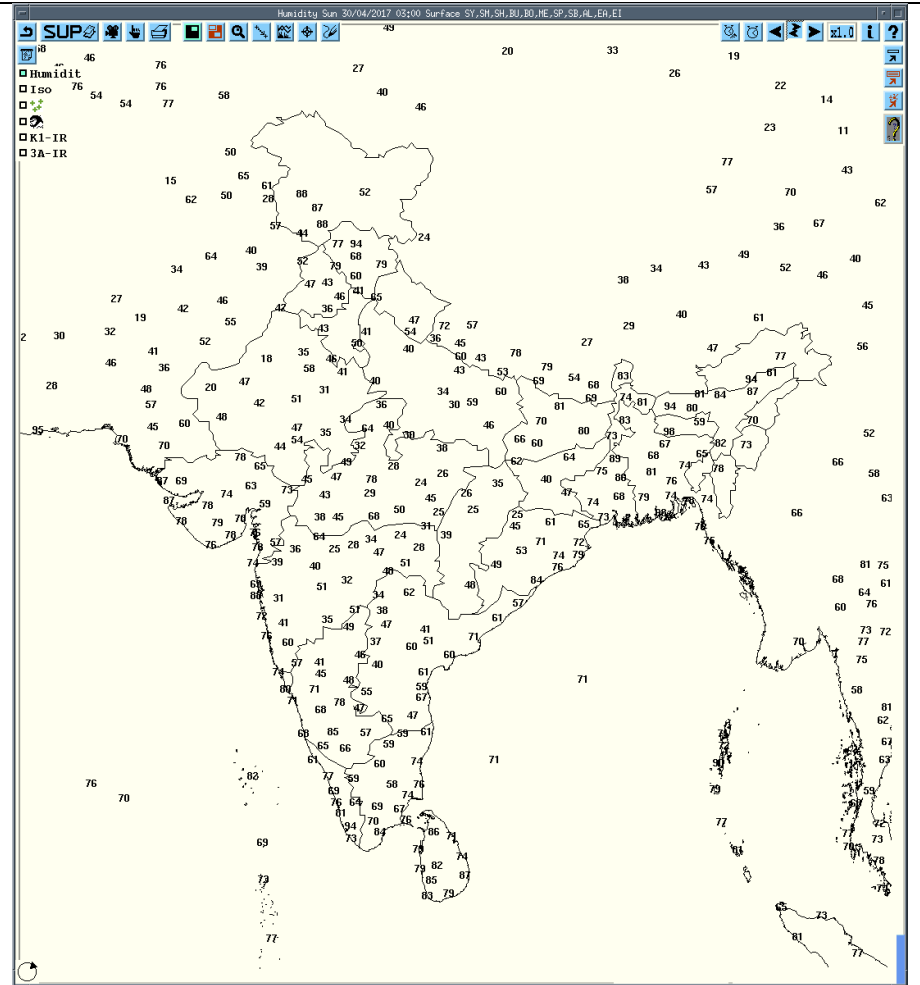
Departure MSLP



Tendency MSLP



RH at 12UTC yesterday



RH at 03UTC today

Realized weather past 24hours (Based on SYNERGIE Products)					
Date	Time of Reporting	Name of Station Reporting	Region	STATE	Weather Event
29-04-17	0600 UTC	Banihal, Bhaderwah, Jammu	Northwest India	Jammu & Kashmir	Thunderstorm
		Cooch Behar	East India	WB(SHWB)	Thunderstorm
29-04-17	0900 UTC	Batote, Kukernag	Northwest India	Jammu & Kashmir	Thunderstorm
		Shimla	Northwest India	Himachal Pradesh	Thunderstorm
		Gangtok	East India	Sikkim	Thunderstorm
		Tezpur	Northeast India	Assam	Thunderstorm
		Belgaum	South India	Karnataka	Thunderstorm
29-04-17 29-04-17 29-04-17 29-04-17 29-04-17 29-04-17	1200 UTC	Kukernag, Banihal, Pahalgam	Northwest India	Jammu & Kashmir	Thunderstorm
		Agra	Northwest India	Uttar Pradesh	Thunderstorm
		Itanagar	Northeast India	Arunachal Pradesh	Thunderstorm
		Indore	Central India	Madhya Pradesh	Thunderstorm
		Sangali	Central India	Maharashtra	Thunderstorm
		Jagdapur	Central India	Chhattisgarh	Thunderstorm
		Tuni	South India	Andhra Pradesh	Thunderstorm
29-04-17 29-04-17	1500 UTC	Gadag, Chitradurga, Shimoga, Banglore, Madikeri	South India	Karnataka	Thunderstorm
		Bareilly	Northwest India	Uttar Pradesh	Thunderstorm
		North Lakhimpur	Northeast India	Assam	Thunderstorm
	1800 UTC	Agartala	Northeast India	Tripura	Thunderstorm
		Amritsar	Northwest India	Punjab	Thunderstorm
		Tezpur, Guwahati	Northeast India	Assam	Thunderstorm
		Ajmer	Northwest India	Rajasthan	Thunderstorm
29-04-17	2100 UTC	Ramagundam, Hyderabad	South India	Andhra Pradesh	Thunderstorm
		Amritsar	Northwest India	Punjab	Thunderstorm
		Ambala, Chandigarh	Northwest India	Haryana	Thunderstorm
		Lucknow	Northwest India	Uttar Pradesh	Thunderstorm
		Guwahati	Northeast India	Assam	Thunderstorm
30-04-17	0000 UTC	Nagpur	Central India	Maharashtra	Thunderstorm
		Pahalgam, Bhaderwah	Northwest India	Jammu & Kashmir	Thunderstorm
		Amritsar, Patiala	Northwest India	Punjab	Thunderstorm
		Sundernagar	Northwest India	Himachal Pradesh	Thunderstorm
		Ambala	Northwest India	Haryana	Thunderstorm
		Dehradun	Northwest India	Uttarakhand	Thunderstorm
		Guwahati	Northeast India	Assam	Thunderstorm

30-04-17	0300 UTC	Banihal	Northwest India	Jammu & Kashmir	Thunderstorm
		Solan	Northwest India	Himachal Pradesh	Thunderstorm
		Ludhiana	Northwest India	Punjab	Thunderstorm

Past 24 hours DWR Report:










Radar Station name	Date	Time interval of observation (UTC)	Organization of the cells (Isolated single cells/multiple cells/ convective regions/ squall lines) with height of 20 dBZ echo top and maximum reflectivity	Formation w.r.t radar station and Direction of movement	Remarks	Associated severe weather if any	Districts affected
Patiala	30-04-17	0300-0600	NIL	NIL	NIL	NIL	NIL
		0600-0900	NIL	NIL	NIL	NIL	NIL
		0900-1200	MULTIPLE ECHO CELLS	NE	MAX. DBZ 47.0; AV. HT. 10-12 KMS	TS/RA	SOLAN; NAHAN.
		1200-1500	ISOLATED CELL	NE	MAX. DBZ 63.0; AV. HT. 10-12 KMS	HAIL/TS/RA	LUDHIANA; KHANNA HAILSTORM LIKELY OVER LUDHIANA
		1500-1800	MULTIPLE CELLS	NE	MAX. DBZ 53.0; AV. HT. 10-12 KMS	HAIL/TS/RA	ROOPNAGAR, NAWANS HAGR; SAS NAGAR; NAHAN
		1800-2100	MULTIPLE CELLS	NE	MAX. DBZ 56.0; AV. HT. 10-12	HAIL/TS/RA	ROOPNAGAR, NAWANS HAGR; SAS NAGAR; NAHAN
		2100-0000	MULTIPLE CELLS	NE	MAX. DBZ 53.50; AV. HT. 09-10 KMS	HAIL/TS/RA	SANGRUR; DEVIGARH; BARNALA; PATIALA; BHATINDA.
		0000-0252	MULTIPLE CELLS	NE	MAX. DBZ 57.0; AV. HT. 10-12 KMS	HAIL/TS/RA	AMRITSAR; PATIALA; ROHTAK; BHIWANI;

							KARNAL; AMBALA.
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Radar Station name	Date	Time interval of observation (UTC)	Organization of the cells (Isolated single cells/multiple cells/ convective regions/ squall lines) with height of 20 dBZ echo top and maximum reflectivity	Formation w.r.t radar station and Direction of movement	Remarks	Associated severe weather if any	Districts affected
Agartala	30-04-17	291030 - 291810	Squall line with Maximum Height 16km and maximum reflectivity 43dBZ (at 1240 UTC over Bangladesh-220 km West of DWR AGT)	Formation of the system unknown as the 500km Range PPI-Z is not working. System first visible in DWR AGT 250 km WNW at 1030 UTC of 29.04.17 and moved ESE-wards at around 50 kmph	The cells dissipated at 1810 UTC of 29.04.17 over Mizoram	1.TS with rain & squall at Agartala Airport 2.Light Rain at other places	All districts of Tripura
		291430 - 291900	Multiple Cells with Maximum Height 12km and maximum reflectivity 46dBZ (at 1650 UTC over South Meghalaya)	Formed 150 km North of DWR AGT at 1430 UTC of 29.04.17 and moved ESE-wards at around 40 kmph	The cells dissipated at 1900 UTC of 29.04.17 over East Meghalaya & adj Assam	TS with heavy rain at Cherrapunjee	East Khasi hills districts of Meghalaya

Radars Station name	Date	Time interval of observation (UTC)	Organization of the cells (Isolated single cells/multiple cells/ convective regions/ squall lines) with height of 20 dBZ echo top and maximum reflectivity	Formation w.r.t radar station and Direction of movement	Remarks	Associated severe weather if any	Districts affected
Visakhapatnam	30-04-17	0300 UTC-0600 UTC	Isolated single cell with max 50 dBz and max height 8Kms.	A single cell at a distance of 86 kms in NW ly direction.	NIL-	-	-
		0600 UTC-0900 UTC	Multiple cells in a squall line with max reflectivity 58dBz and max height 14Kms.	Well developed cells in NW sector to the radar at a distance of 80 kms moving SEly slowly.	Existing cells are full developed and new cells are forming	-	-
		0900 UTC-1200 UTC	Multiple cells in a squall line with max reflectivity 58dBz and max height 14Kms.	Well developed cells in NW to SW sector at a distance of 20 to 150 kms and NNE sector at a distance of 100 kms to the radar moving SEly slowly.	Existing cells are full matured and dissipating.	-	-
		1200 UTC-1500 UTC	Multiple cells i with max reflectivity 53dBz and max height 10Kms.	SW(120km) NE(120 KM) moving Ely	cells are in dissipating stage.	-	-
		1500 UTC-1800 UTC	Multiple cells i with max reflectivity 45dBz and max height 8Kms.	SW(45 km) moving Ely	cells are dissipating during the period.	-	-
		1800 UTC-0000 UTC	Convective region of max reflectivity 50dBz and max height 6Kms.	SW(170 km) moving Ely	Convective region formed in BOB not matured well and start dissipating.	-	-
Lucknow	30-04-17	Nil	Under maintenance				
Patna	30-04-17	290300 - 300300	Nil	Nil	Nil	Nil	Nil
JAIPUR	30/04/17	0832 - 0122 UTC	Multiple cell average height of 12.1 km maximum reflectivity 53.5 dBZ	Continuous from Last day SE & EAST wards at speed direction 42 km/hr to 60 km/hr different times	Cells continuous forming 0302 UTC SE Jaipur and multiple cell was observed and maximum refelectivity during 0302-0442 , 0812 to 1622,1722 to 2232 UTC and died down at 0242 UTC.	TSRA AT ISOLATED PLACES	TONK,JAIPUR,AJMER,JHUNJHUNU,AJMER,KOTA,BHILWARA,BARAN,D AUSA,BHARATPUR,ALAWAR,SIKAR,CHURU,NAGAU,R,DHOLPUR DISTRICTS

∞	haze
☁	smoke
☁	dust or sand storm
☁	fog
☁	drizzle
•	rain
*	snow
▽	showers
△	hail
☁	thunderstorm
Weather Symbols	

		
+ thunderstorm	+ heavy thunderstorm	sandstorm or dust storm
		
squall	hail shower	tropical storm
		
+ tornado	+ lightning	+ hurricane